

B. Amendments to the claims

Claim 1 (Currently amended): A method for handling a request for a resource, said the request being made by applications running on a computer, the computer being part of a network of computers, each computer on said the network comprising including a host program, said the host program comprising including one or more symbionts, the one or more symbionts being connected to each other for communication, said the one or more symbionts encapsulating resources, said the method comprising the steps of:

- a. said the host program receiving said the request for said the resource from said at least one of the applications running on the computer;
- b. said the host program contacting a symbiont that encapsulates said the resource; and
- c. said the symbiont performing one of the steps of:
 - i. serving said the request if the load on said the symbiont is less than a threshold, I_{max} ;
 - ii. replicating said the resource on said the host at least one of the applications running on the computer, if the load on said the symbiont is more than the threshold, I_{max} , and the load on all symbionts encapsulating said the resource, is more than a threshold, t ; and
 - ~~iii. replicating said resource on said host, if the load on said symbiont is more than the threshold, I_{max} , and said host has been redirected more than a predetermined number of times,~~
 - ~~iv.~~ iii. redirecting said the request to a the connected replicate of the symbiont, if the load on said the symbiont is more than the threshold, I_{max} , and at least one of the symbionts encapsulating said the resource has a load less than the threshold, t ;

~~and said host has not been redirected more than a predetermined number of times.~~

Claim 2 (Currently amended): The method according to claim 1 ~~wherein said host program exposes one or more symbionts available on said network to said applications running on said computer,~~ further comprising the steps of:

- a. the host exposing the one or more symbionts available in the network to the applications running in the computer; and
- b. the host exposing the one or more symbionts available on the host to the network.

Claim 3 (canceled).

Claim 4 (canceled)

Claim 5 (Currently amended): The method according to claim ~~4~~1, wherein ~~said the~~ replicates of ~~said the~~ resource are connected together in a multiply connected ring.

Claim 7 (Currently amended): The method according to claim 1, wherein ~~said the~~ threshold, I_{max} , of ~~said the~~ symbiont, is lowered to increase the number of replicates according to a predetermined probabilistic measure.

Claim 8 (Currently amended): The method according to claim 1, wherein ~~said the~~ threshold, t , of symbionts encapsulating ~~said replicate of said the~~ resource, is less than ~~said the~~ threshold, I_{max} of ~~said the~~ symbiont.

Claim 9 (Currently amended): The method according to claim 1, wherein ~~said the~~ threshold, t , of symbionts encapsulating ~~said replicate of said the~~ resource, evolves with time according to a predetermined probabilistic measure.

Claim 10 (Currently amended): The method according to claim 1, wherein ~~said the~~ request is redirected to ~~said the connected~~ replicate encapsulated in a symbiont with the least load encapsulating the resource with the least load among the connected replicates in the multiply connected ring.

Claim 11 (canceled)

Claim 12 (Currently amended): A system for handling a request for a resource, said the request being made by applications running on a computer, the computer being part of a network of computers, each computer on said the network comprising including a host program, said the host program comprising including one or more symbionts, the one or more symbionts being connected to each other for communication, said the one or more symbionts encapsulating resources, said the system comprising:

- a. means for said the host program receiving said the request for said the resource from said at least one of the applications running on the computer;
- b. means for said the host program contacting a symbiont that encapsulates said the resource;
- c. means for said the symbiont replicating said the resource onto said host program on the at least one of the applications running on the computer; and
- d. means for the symbiont redirecting the request to a the connected replicate encapsulating the resource.

Claim 13 (Currently amended): The system according to claim 12, ~~wherein said host program exposes one or more symbionts available on said network to said applications running on said computer,~~ further comprising:

- a. means for the host to expose the one or more symbionts available in the network to the applications running in the computer; and
- b. means for the host to expose the one or more symbionts available on the host to the network.

Claim 14 (canceled)

Claim 15 (canceled)

Claim 16 (Currently amended): The system according to claim 4512, wherein ~~said~~ the replicates of ~~said~~ the resource are connected together in a multiply connected ring.

Claim 20 (Currently amended): A method for arranging replicates encapsulating a resources in a network of computers, ~~said each~~ computers ~~on in~~ said the network comprising a host programs, ~~said the~~ host programs comprising one or more symbionts, ~~said the one or more~~ symbionts encapsulating said resources, said the method comprising the steps of:

- a. connecting all the replicates encapsulating the resources in the form of a multiply connected ring;
- b. replicating the resource a symbiont encapsulating a resource on a host program based on predetermined birthing rules on at least one of the applications running on the computer, if load on a symbiont is more than a threshold, I_{max} , and load on all symbionts encapsulating the resource, is more than a threshold, t , wherein the symbiont encapsulates the resource;
- c. connecting a replicate of encapsulating said the resource to ~~said the~~ multiply connected ring; and
- d. ~~one of said deleting the one or more~~ symbionts encapsulating ~~said the~~ resource ceasing to exist from ~~said the~~ multiply connected ring ~~based on predetermined death rules if load of the symbiont is less than a predetermined threshold, I_{min} .~~

Claim 21 (Currently amended): The method according to claim 20 wherein ~~said host~~ program ~~exposes one or more symbionts available on said network to said applications running on said computer,~~ further comprising the steps of:

- a. the host exposing the one or more symbionts available in the network to the applications running in the computer; and
- b. the host exposing the one or more symbionts available on the host to the network.

Claim 22 (canceled)

Claim 23 (canceled)

Claim 24 (Currently amended): The method according to claim ~~23~~20, wherein ~~said the~~ replicates of ~~said the~~ resource are connected together in a multiply connected ring.

Claim 27 (canceled)

Claim 28 (Currently amended): The method according to claim ~~27~~20, wherein ~~said the~~ threshold, I_{\max} , of ~~said the~~ symbiont, is lowered to increase the number of replicates.

Claim 29 (Currently amended): The method according to claim ~~27~~20, wherein ~~said the~~ threshold, t , of symbionts ~~encapsulating said replicate of said the~~ resource, is less than ~~said the~~ threshold, I_{\max} of ~~said the~~ symbiont.

Claim 30 (Currently amended): The method according to claim ~~27~~20, wherein ~~said the~~ threshold, t , of symbionts ~~encapsulating said replicate of said the~~ resource, evolves with time according to a predetermined probabilistic measure.

Claim 31 (Currently amended): The method according to claim 20, further comprises the ~~step of:~~

~~a.~~ marking one of ~~said the~~ symbionts encapsulating ~~said the~~ resource as immortal.

Claim 32 (Currently amended): The method according to claim 20, wherein ~~said the~~ step of ~~deleting the one or more of said~~ symbionts encapsulating ~~said the~~ resource ~~ceasing to exist from said the multiply connected ring based on predetermined death rules,~~ comprises the steps of:

a. ~~said all the~~ symbionts checking their loads at regular time intervals; ~~and.~~

b. ~~said symbionts dying if their load is less than a threshold, I_{\min} .~~

Claim 33 (Currently amended): The method according to claim 32, wherein ~~said the~~ regular time intervals are ~~depend on time scale of natural fluctuations in the~~ dependent on the variation of load on a the symbiont.

Claim 34 (Currently amended): The method according to claim 20, wherein ~~said the~~ predetermined threshold, I_{min} , depends on the number of ~~said the~~ symbionts.

Claim 35 (canceled)

Claim 36 (Currently amended): A system for arranging replicates of a resources in a network of computers, ~~said each~~ computers on ~~said the~~ network comprising a host programs, ~~said the~~ host programs comprising one or more symbionts, ~~said the one or more~~ symbionts encapsulating said resources, ~~said the system comprising:~~

- a. means for connecting all the replicates of the resources in the form of a multiply connected ring;
- b. means for replicating the resource ~~a-symbiont-encapsulating a-resource-onto-said host-based-on-predetermined-birthing-rules~~ on one of the host programs in the network of computers;
- c. means for joining a replicate of ~~said the~~ resource to ~~with~~ said the multiply connected ring; and
- d. means for deleting the one or more of ~~said~~ symbionts encapsulating said the resource ~~ceasing-to-exist from said the~~ multiply connected ring, based on predetermined death rules if load of the symbiont falls below a predetermined threshold, I_{min} .

Claim 37 (Currently amended): The system according to claim 36 wherein ~~said host program exposes one or more symbionts available on said network to said applications running on said computer,~~ further comprising:

- a. means for the host to expose the one or more symbionts available in the network to the applications running in the computer; and
- b. means for the host to expose the one or more symbionts available on the host program to the network.

Claim 38 (canceled)

Claim 39 (canceled)

Claim 40 (Currently amended): The system according to claim ~~39~~36, wherein ~~said the~~ replicates of ~~said the~~ resource are connected together in a multiply connected ring.

Claim 44 (Currently amended): The system according to claim 36, ~~for~~, further comprising:
a- means for marking one of ~~said the~~ symbionts encapsulating ~~said the~~ resource, as immortal.

Claim 45 (Currently amended): The system according to claim 36, wherein ~~said the~~ means for deleting the one or more of ~~said~~ symbionts encapsulating ~~said the~~ resource, ~~ceasing to exist from said the multiply connected ring based on predetermined death rules, comprises the steps of:~~

a- means for ~~said the~~ symbionts checking their loads at regular time intervals; ~~and.~~

b- ~~means for said symbionts dying if their load is less than a threshold, I_{min} .~~

Claim 46 (Currently amended): The system according to claim 45, wherein ~~said the~~ regular time intervals are depend on time scale of natural fluctuations in the ~~dependent on~~ the variation of load on a the symbiont.

Claim 47 (Currently amended): The system according to claim ~~36~~ 45, wherein ~~said the~~ predetermined threshold, I_{min} , depends on the number of ~~said the~~ symbionts.

Claim 48 (canceled)